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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,209	10/30/2001	John J. Light	10559-538001/P12444	4981
20985	7590	12/14/2005	EXAMINER KUMAR, SRILAKSHMI K	
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			ART UNIT 2675	PAPER NUMBER

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/003,209

Applicant(s)

LIGHT, JOHN J.

Examiner

Srilakshmi K. Kumar

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2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The following office action is in response to amendment a filed on September 16, 2005. Claims 1, 11 and 21 have been amended. Claims 1-30 are pending.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 6, 8-13, 15, 16, 18-23, 25, 26, 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bisey (US 5,367,614).

As to independent **claims 1, 11 and 21**, Bisey discloses a method and apparatus of displaying a virtual three dimensional scene (Fig. 1, col. 3, lines 39-49), comprising;

Bisey discloses a computer, Fig. 1, item 38, in which there is a memory that stores executable instructions.

Bisey discloses a processor (computer, item 38) that executes the instructions to: track a positional change of a head of a user relative to a non-head mounted display (Fig. 1, item 10, col. 3, line 50-col. 4, line 12); transforming the virtual 3D scene in accordance with the positional change of the head (col. 3, lines 44-49); and rendering on the display a transformed virtual 3D scene (col. 5, lines 1-13).

As to dependent **claims 2, 12 and 22**, limitations of claims 1, 11 and 21, and further comprising, Bisey discloses wherein transforming the virtual 3D scene comprises shifting the

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virtual 3D scene in a left direction of the user when the head moves in a right direction of the user (col. 5, lines 1-36).

As to dependent **claims 3, 13 and 23**, limitations of claims 2, 12 and 22, and further comprising, Bisey discloses wherein transforming the virtual 3D scene comprises shifting the 3D scene in a right direction of the user when the head moves in a left direction of the user (col. 5, lines 1-36).

As to dependent **claims 5, 15 and 25**, limitations of claims 1, 11 and 21, and further comprising, Bisey discloses wherein transforming the virtual 3D scene comprises increasing a magnification of the virtual 3D scene when the head moves toward the display (col. 5, lines 29-36).

As to dependent **claims 6, 16 and 26**, limitations of claims 5, 15 and 25, and further comprising, wherein transforming the virtual 3D scene comprises reducing the magnification of the virtual 3D scene when the head moves away from the display (col. 5, lines 29-36).

As to dependent **claims 8, 18 and 28**, limitations of claims 3, 13 and 23, and further comprising, Bisey discloses wherein the virtual 3D scene is shifted with respect to the head by a factor of 10 in col. 5, lines 1-36.

As to dependent **claims 9, 19 and 29**, limitations of claims 1, 11 and 21, and further comprising, Bisey discloses wherein tracking the positional change of the head further comprises tracking an iridescent color in an object attached to the head (col. 7, lines 22-57).

As to dependent **claims 10, 20 and 30**, limitations of claims 1, 11 and 21, and further comprising, wherein transforming the virtual 3D scene comprises decreasing a magnification of

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the 3D scene when the head moves towards the display and increasing the magnification of the scene when the head moves away from the display (col. 5, lines 29-36).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 4, 7, 14, 17, 24, 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisey (US 5,367,614) in view of Stern et al. (US 6,592,223).

As to dependent **claims 4, 14 and 24**, limitations of claims 3, 13 and 23, Bisey does not disclose a camera. Stern et al disclose a computer system using a camera mounted on the display to detect the user as shown in Figs. 1 and 2, item 40 and col. 4, lines 46-60. It would have been obvious to one of ordinary skill in the art to incorporate the camera of Stern et al into that of Bisey as the camera is advantageous as it is used to distinguish the users face from other objects and identify the eyes in order to make the system user specific as shown in col. 4, lines 46-60 of Stern et al.

As to dependent **claims 7, 17 and 27**, limitations of claims 5, 15 and 25, and further comprising, Bisey does not disclose a camera. Stern et al disclose a computer system using a camera mounted on the display to detect the user as shown in Figs. 1 and 2, item 40 and col. 4, lines 46-60. It would have been obvious to one of ordinary skill in the art to incorporate the camera of Stern et al into that of Bisey as the camera is advantageous as it is used to distinguish

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the users face from other objects and identify the eyes in order to make the system user specific as shown in col. 4, lines 46-60 of Stern et al.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 571 272 7769. The examiner can normally be reached on 10:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Srilakshmi K. Kumar  
Examiner  
Art Unit 2675

SKK  
December 7, 2005

  
SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER